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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

EVOY, NICHOLAS LANE

ART UNIT

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3768

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/569,953	Applicant(s) TAKIGUCHI, KIYOAKI	
	Examiner NICHOLAS L. EVOY	Art Unit 3768	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/7/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-15 rejected under 35 U.S.C. 102(b) as being anticipated by Gersheneld et al, US Patent Number 5,914,701.

3. In re claim 1, Gersheneld discloses a measuring apparatus comprising: quasi-electrostatic field generating means generating a quasi-electrostatic field of higher field strength as compared with a radiated electric field and an induced electromagnetic field; quasi-electrostatic field detecting means detecting a result of interaction between said quasi-electrostatic field generated by said quasi-electrostatic field generating means and applied to an object to be measured, and an electric field corresponding to a potential change caused by a dynamic reaction inside said object to be measured; and extracting means extracting said potential change from said result of interaction detected by said quasi-electrostatic field detecting means (i.e. the quasi-electrostatic field being stronger than the negligible electromagnetic field, see Column 2, Lines 1-8, Column 2, Lines 25-36, Column 3, Lines 38-46, Column 3, Lines 57-67, Column 4, Lines 1-10 and Column 6, Lines 38-49).

4. In re claim 2, Gersheneld discloses the measuring apparatus according to claim 1, wherein: said object to be measured is a living body; and said quasi-electrostatic field

Art Unit: 3768

detecting means detects said result of interaction with said electric field corresponding to said potential change caused by a biological reaction inside said living body

(Abstract).

5. In re claim 3, Gersheneld discloses the measuring apparatus according to claim 1, wherein said quasi-electrostatic field generating means generates said quasi-electrostatic fields of said higher field strength as compared with said induced electromagnetic field, at each of said distances respectively corresponding to said plurality of frequencies (Column 2, Lines 54-59).

6. In re claim 4, Gersheneld discloses the measuring apparatus according to claim 1, wherein said quasi-electrostatic field generating means generates said quasi-electrostatic fields of said higher field strength as compared with said induced electromagnetic field, in time division manner for each of said distances at each of said distances respectively corresponding to said plurality of frequencies (i.e. the electromagnetic field is inherently smaller, Column 2, Lines 54-59).

7. In re claim 5, Gersheneld discloses the measuring apparatus according to claim 3, wherein said quasi-electrostatic field generating means comprises output adjusting means adjusting outputs of each voltage corresponding to each of said frequencies to a predetermined electrode, to make the strength of each of said quasi-electrostatic fields generated at each of said distances respectively corresponding to each of the frequencies become a predetermined field strength, and outputting a combined result of each of said voltages after the adjustment (Column 2, Lines 9-19).

Art Unit: 3768

8. In re claim 6, Gersheneld discloses the measuring apparatus according to claim 4, wherein said quasi-electrostatic field generating means comprises output adjusting means adjusting outputs of each voltage corresponding to each of said frequencies to a predetermined electrode, to make the strength of each of said quasi-electrostatic fields generated at each of said distances respectively corresponding to each of the frequencies become a predetermined field strength (Column 2, Lines 20-39 and Column 5, Lines 4-11).

9. In re claim 7, Gersheneld discloses the measuring apparatus according to claim 1, wherein: said quasi-electrostatic field generating means comprises a pair of electrodes for generation generating said quasi-electrostatic fields; said quasi-electrostatic field detecting means comprises a pair of electrodes for detection detecting said result of interaction; and said pair of electrodes for generation and said pair of electrodes for detection are formed into a unit electrode and a plurality of said unit electrodes are formed on the same surface (Column 4, Lines 55-64).

10. In re claim 8, Gersheneld discloses a measuring method comprising: a quasi-electrostatic field generating step generating a quasi-electrostatic field of higher field strength as compared with a radiated electric field and an induced electromagnetic field; a quasi-electrostatic field detecting step detecting a result of interaction between said quasi-electrostatic field generated in said quasi-electrostatic field generating step and applied to an object to be measured, and an electric field corresponding to a potential change caused by a dynamic reaction inside said object to be measured; and an extracting step extracting said potential change from said result of interaction detected

Art Unit: 3768

in said quasi-electrostatic field detecting step (i.e. the quasi-electrostatic field being stronger than the negligible electromagnetic field, see Column 2, Lines 1-8, Column 2, Lines 25-36, Column 3, Lines 38-46, Column 3, Lines 57-67, Column 4, Lines 1-10 and Column 6, Lines 38-49).

11. In re claim 9, Gersheneld discloses the measuring method according to claim 8, wherein said object to be measured is a living body, and wherein said result of interaction with said electric field corresponding to said potential change caused by a biological reaction inside said living body is detected in said quasi-electrostatic field detecting step (Abstract).

12. In re claim 10, Gersheneld discloses the measuring method according to claim 8, wherein said quasi-electrostatic fields of said higher field strength as compared with said induced electromagnetic field at each of said distances respectively corresponding to a plurality of said frequencies are generated in said quasi-electrostatic field generating step (Column 2, Lines 54-59).

13. In re claim 11, Gersheneld discloses the measuring method according to claim 8, wherein said quasi-electrostatic fields of said higher field strength as compared with said induced electromagnetic field are generated in time division manner for each of said distances at each of said distances respectively corresponding to a plurality of said frequencies in said quasi-electrostatic field generating step (i.e. the electromagnetic field is inherently smaller, Column 2, Lines 54-59).

14. In re claim 12, Gersheneld discloses the measuring method according to claim 10, wherein said quasi-electrostatic field generating step comprises output adjusting

Art Unit: 3768

step adjusting outputs of each voltage corresponding to each of said frequencies to a predetermined electrode, to make the strength of each of said quasi-electrostatic fields generated at said distances respectively corresponding to each of the frequencies become a predetermined field strength, and outputting a combined result of each of said voltages after the adjustment (Column 2, Lines 9-19).

15. In re claim 13, Gersheneld discloses the measuring method according to claim 11, wherein said quasi-electrostatic field generating step comprises output adjusting step adjusting outputs of each voltage corresponding to each of said frequencies to a predetermined electrode, to make the strength of each of said quasi-electrostatic fields generated at said distances (Column 2, Lines 20-39 and Column 5, Lines 4-11).

16. In re claim 14, Gersheneld discloses a measuring apparatus comprising: quasi-electrostatic field detecting means detecting potential changes caused by biological reactions inside a living body; and extracting means extracting one of said potential changes caused by predetermined one of said biological reactions from said potential changes detected by said quasi-electrostatic field detecting means (i.e. the quasi-electrostatic field being stronger than the negligible electromagnetic field, see Column 2, Lines 1-8, Column 2, Lines 25-36, Column 3, Lines 38-46, Column 3, Lines 57-67, Column 4, Lines 1-10 and Column 6, Lines 38-49).

17. In re claim 15, Gersheneld discloses a measuring method comprising: quasi-electrostatic field detecting step detecting potential changes caused by biological reactions inside a living body; and extracting step extracting one of said potential change caused by predetermined one of said biological reactions from said potential

Art Unit: 3768

changes detected in said quasi-electrostatic field detecting step (i.e. the quasi-electrostatic field being stronger than the negligible electromagnetic field, see Column 2, Lines 1-8, Column 2, Lines 25-36, Column 3, Lines 38-46, Column 3, Lines 57-67, Column 4, Lines 1-10 and Column 6, Lines 38-49).

Response to Arguments

1. Applicant's arguments filed 12/18/09 have been fully considered but they are not persuasive.

2. The examiner acknowledges Applicant's amendments to the claims to address the informalities cited in the previous office action.

18. Regarding Applicant's argument regarding the rejection of claims under 35 U.S.C. 102(b) as being anticipated by Gersheneld et al, US Patent Number 5,914,701: Applicant alleges that Gersheneld does not teach or suggest at least "detecting a result of interaction between said quasi-electrostatic field and an electric field corresponding to a potential change caused by a dynamic reaction inside said object", however the Examiner disagrees. Gersheneld discloses that "the user's body acts as a conductive node and a receiver that is capacitively coupled to the user's body responds to the displacement currents passed to it from the body, to detect the low frequency signals. The user's body thus becomes part of the system rather than an impediment to signal propagation" (Column 2, Lines 1-8). Because the user's body becomes a part of the system and causes a change from the input (into the body) to the output (out of the body), there is a dynamic reaction inside said object. Additionally, Gersheneld further

Art Unit: 3768

discloses "In an alternative configuration the system passes to a receiver that is worn or carried by a user, information from medical instruments that are monitoring the physiological condition of the user. In this configuration, each of the medical instruments is connected directly to an associated transmitter that is worn by the user. Each of these transmitters is capacitively coupled to the user and to room ground, such that the signals are passed as displacement currents to the user and from the user to the receiver" (Column 3, Lines 7-15). Because the system is interfacing directly with processes occurring inside the body of the user, it is clear the Gersheneld discloses "detecting a result of interaction between said quasi-electrostatic field and an electric field corresponding to a potential change caused by a dynamic reaction inside said object". Other notable portions of Gersheneld include: Column 2, Lines 25-36, Column 3, Lines 38-46, Column 3, Lines 57-67, Column 4, Lines 1-10 and Column 6, Lines 38-49.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 3768

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICHOLAS L. EVOY whose telephone number is (571)270-1388. The examiner can normally be reached on M-F 7:30-5:00, Alternating Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (571)272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NLE 4/7/10

/Long V Le/
Supervisory Patent Examiner, Art Unit 3768